IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants

Michael C. Weaver et al.

Application No.

09/520,264

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For

NETWORK-BASED SYSTEM AND METHOD FOR ACCESSING

AND PROCESSING LEGAL DOCUMENTS

Examiner

Te Y. Chen

Art Unit

2161

Docket No.

110172.401 (APDS-1-2401)

Date

August 17, 2009

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AMENDED APPELLANT'S BRIEF

Commissioner for Patents:

This brief is in furtherance of the Notice of Appeal, filed in this case on November 24, 2008. A first Appellant's Brief, along with the required fees, was timely filed on December 8, 2008, along with the fees required under Section 1.17(c), and any required request for extension of time. Applicant has filed concurrent herewith an Amendment to request cancelation of claims 81-84 from the claims on appeal under 37 CFR 41.33(d). This Amended Appellant's Brief has been updated to reflect entry thereof.

I. REAL PARTY IN INTEREST

Applied Discovery, Inc. is the real party in interest and is recorded as the assignee of the present application in reel 010836, frame 0959 at the U.S. Patent Office. LexisNexis, which is a division of Reed Elsevier Group, acquired Applied Discovery, Inc. in July 2003 and so Applied Discovery, Inc. has become part of the LexisNexis Group.

II. RELATED APPEALS AND INTERFERENCES

None.

III. STATUS OF CLAIMS

Claims 51-53, 55-78, and 80-97 are pending and have been at least twice rejected. The rejection of claims 51-53, 55-78, 80, and 85-97 is being appealed herein. Claims 1-50, 54, and 79 have been previously canceled. Cancelation of claims 81-84 is being concurrently requested in an Amendment filed herewith.

IV. STATUS OF AMENDMENTS

An Amendment, filed herewith, is currently outstanding to cancel claims 81-84 as part of the appeal process. A non-final Office Action was mailed on July 24, 2008 (hereinafter referred to as "the Office Action of July 24, 2008") in response to an amendment and Request for Continued Examination (RCE) previously filed on October 31, 2007 (hereinafter referred to as "the amendment of October 31, 2007"). Since the currently pending claims 51-53, 55-78, and 80-97 have been at least twice rejected as of the Office Action of July 24, 2008, the present application is eligible for appeal, and a Notice of Appeal was filed on November 24, 2008 in accordance with 37 C.F.R. § 41.31(a)(1), from which the present Appellant's Brief follows.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The present U.S. Application Serial No. 09/520,264 (hereinafter referred to as "the present application") discloses embodiments that assist legal professionals (such as attorneys) in analyzing or otherwise processing electronic files that are subject to a legal proceeding, such as a "discovery" process. As explained in page 1, line 15 to page 2, line 23 of the present application, "discovery" is a document-intensive legal process in which one party (e.g., a "requesting party") frequently requests another party (e.g., a "responding party") to produce documents. The requesting party attempts to build its case by reviewing the requested documents and trying to locate highly significant individual documents (sometimes referred to as "hot documents") that contain text or other information of an incriminating or otherwise significant nature. Typically, a large volume of documents are produced during discovery, thereby requiring significant time and effort to review and process such documents.

As explained on page 2, line 24 to page 4, line 24 of the present application, email and other forms of electronic files have gained the attention of legal professionals as a rich source of discoverable information. However, traditional methods of discovery involve printing out emails into paper hardcopies, and then manually reviewing and processing (such as indexing) such hardcopies in a manner similar to traditional paper documents. Printing email from its native electronic format into hardcopies results in the destruction of useful electronic characteristics of the emails, such as the lost of the conversational threads and other metadata.

Accordingly, embodiments disclosed in the present application provide legal professionals with access to electronic legal documents, via a network such as the Internet. These legal documents can include email documents, for example, that are produced in response to discovery requests and which are loaded into a database accessible via a server. Other examples of "electronic documents" can include electronic calendars/schedules, word-processing files, spreadsheets, text and graphics files, various application files, or any other type of electronic file or data that can be stored in a computer-readable storage media, and which can be subject to a legal proceeding or need to be otherwise reviewed/accessed. Once access has been granted to authorized legal professionals, the legal professionals can perform online search queries, indexing, data manipulation, and various other online operations to obtain and track results of their document review. According to one embodiment, electronic characteristics (e.g., metadata and other properties) associated with a native format of the electronic legal documents can be substantially preserved and used to perform various indexing and processing operations. See, e.g., page 7, line 11 to page 8, line 2 of the present application.

According to one embodiment, electronic files to be processed for a legal proceeding (such as discovery) are received externally from an information system of a party involved in the legal proceeding. The electronic files are stored in a directory structure on a storage medium (such as CD) provided by the information system. *See, e.g.*, page 11, lines 15-22 and page 16, lines 15-18 of the present application. At least one recursive engine recursively goes through a plurality of paths of the directory structure to extract the electronic files, while preserving the directory structure from which the electronic files were taken. *See, e.g.*, page 16, lines 20-25 of the present application. The extracted electronic files are then converted to a searchable text format and into a read-only format and then stored, and the metadata associated

with the extracted electronic files are also stored. *See, e.g.*, page 12, line 25 to page 13, line 8 of the present application. After the electronic files are stored and indexed in this manner, a legal professional can review or otherwise process the electronic files (such as marking documents as being relevant) after submitting keyword and/or metadata queries to retrieve a set of electronic files that match the search criteria in the queries. *See, e.g.*, page 13, line 24 to page 15, line 24 of the present application.

The following discusses independent claims 60, 69, 75, and 85. According to 37 CFR 41.67(c)(1)(v), a concise explanation of the subject matter in the independent claims has been set forth below with reference to the specification by page and line numbers, and to the drawings, if any, by reference characters. Accordingly, the following shows claims 60, 69, 75, and 85 together with the required reference information in brackets [] and *italicized*. Of course, the reference numbers and other bracketed information are illustrative only and are not intended to limit the claims only to the exact embodiments shown and described in the specification and figures of the present application.

60. A method in a computer system [112, 206, 122, 134, 120, 202, 204, and 208 in Figures 1-2; page 12, line 7 to page 13, line 23] for analyzing data produced for legal purposes, the method comprising:

receiving, from an information system [130 in Figure 1; page 11, lines 15-16] that is external to the computer system for analyzing data produced for legal purposes, a plurality of electronic files [310 in Figure 3; page 16, lines 6-19] that are stored in a data structure [132 in Figure 1; page 11, lines 17-19] arranged according to a directory structure [page 16, lines 15-18], that are subject to a legal proceeding [page 7, lines 18-19], and that are produced by at least one party involved in the legal proceeding [page 11, lines 16-17], said received plurality of electronic files having electronic characteristics that include metadata [page 19, lines 6-10];

recursively extracting the plurality of electronic files from a plurality of paths of said directory structure of the data structure that is received from the external information system [312-316 in Figure 3; page 16, line 20 to page 18, line 3];

storing the recursively extracted electronic files in a searchable text format in a first server unit [202 in Figures 2-3; page 13, lines 3-5 and lines 11-15], including storing textual

content of the recursively extracted electronic files in the searchable text format in the first server unit [340 in Figure 3; page 13, lines 11-14; page 20, lines 1-5];

obtaining the metadata from each of the recursively extracted electronic files [318, 322, and 332 in Figure 3; page 19, lines 6-8], and storing the metadata in a second server unit [204 in Figures 2-3; page 19, lines 8-10], said storing including storing information of said directory structure of the received data structure so as to maintain said directory structure [page 16, lines 1-4 and lines 22-25; page 18, lines 4-5; page 21, lines 1-5];

converting the recursively extracted electronic files to a read-only format [324, 328, 326, and 330 in Figure 3; page 18, lines 9-20], and storing the electronic files in the read-only format in a third server unit [208 in Figures 2-3; page 13, lines 9-11];

receiving a request for electronic files having a specified text or metadata characteristic [page 13, line 24 to page 15, line 12; 510 in Figure 6]; and

processing the stored metadata to determine a set of electronic files having the specified text or metadata characteristic, thereby facilitating processing of the determined set of electronic files for legal purposes [page 14, lines 9-21; page 28, lines 7-20; 416 in Figure 4; 512 in Figure 6].

69. A method in a computer system [112, 206, 122, 134, 120, 202, 204, and 208 in Figures 1-2; page 12, line 7 to page 13, line 23] for facilitating the analysis of data produced for legal purposes, the method comprising:

receiving, from an information system [130 in Figure 1; page 11, lines 15-16] that is external to the computer system for analyzing data produced for legal purposes, a plurality of electronic files [310 in Figure 3; page 16, lines 6-19] that are subject to a legal proceeding [page 7, lines 18-19], that are produced for purposes of the legal proceeding by at least one party involved in the legal proceeding [page 11, lines 16-17], and that are stored prior to being received by the computer system in a data structure [132 in Figure 1; page 11, lines 17-19] associated with the external information system, said received plurality of electronic files having electronic characteristics that include metadata [page 19, lines 6-10];

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recursively extracting from a plurality of paths of a directory structure of the data structure the plurality of electronic files received from the external information system [312-316 in Figure 3; page 16, line 20 to page 18, line 3];

converting each of the recursively extracted electronic files to a searchable text format [134, 336, and 340 in Figure 3; page 20, lines 1-5; page 15, line 25 to page 16, line 4], and storing in a first server unit content of the converted files in the searchable text format [202 in Figures 2-3; page 13, lines 3-5 and lines 11-15];

obtaining and storing in a second server unit said metadata from each of the recursively extracted electronic files [318, 322, and 332 in Figure 3; page 19, lines 6-10; 204 in Figures 2-3; page 19, lines 6-10];

converting each of the recursively extracted electronic files to a format displayable on a display screen [324, 328, 326, and 330 in Figure 3; page 18, lines 9-20; 118 in Figure 1; page 8, lines 13-14], and storing the converted files in the displayable format in a third server unit [208 in Figures 2-3; page 13, lines 9-11]; and

responding to a request for at least one file having specified metadata or text characteristics using respectively at least one of the stored metadata or the stored content [page 13, line 24 to page 15, line 12; 510 in Figure 6; page 14, lines 9-21; page 28, lines 7-20; 416 in Figure 4; 512 in Figure 6].

75. An article of manufacture for a computer system [112, 206, 122, 134, 120, 202, 204, and 208 in Figures 1-2; page 12, line 7 to page 13, line 23], the article of manufacture comprising:

a computer-readable medium [120 in Figure 2; page 10, lines 7-17] having instructions stored thereon that are executable by a computer processor [318, 320, and 322 in Figure 3; page 18, lines 5-6; page 39, lines 1-2 of claim 28] to analyze data produced for legal purposes, by:

loading, from an information system [130 in Figure 1; page 11, lines 15-16; page 6, lines 10-11] external to the computer system having the machine-readable medium, a plurality of electronic files [310 in Figure 3; page 16, lines 6-19] that are subject to a legal proceeding [page 7, lines 18-19], that are produced by at least one party involved in the legal proceeding

[page 11, lines 16-17], and that are stored in a data structure [132 in Figure 1; page 11, lines 17-19] associated with the external information system prior to being loaded at the computer system, said loaded plurality of electronic files having electronic characteristics that include metadata [page 19, lines 6-10];

recursively extracting the plurality of electronic files from a plurality of paths of a directory structure of the loaded data structure [312-316 in Figure 3; page 16, line 20 to page 18, line 3];

converting and storing in a first server unit content of the recursively extracted electronic files to provide a searchable text format [134, 336, and 340 in Figure 3; page 20, lines 1-5; page 15, line 25 to page 16, line 4; 202 in Figures 2-3; page 13, lines 3-5 and lines 11-15];

obtaining and storing in a second server unit said metadata from each of the recursively extracted electronic files [318, 322, and 332 in Figure 3; page 19, lines 6-10; 204 in Figures 2-3; page 19, lines 6-10];

converting the recursively extracted electronic files to a format displayable on a display screen [324, 328, 326, and 330 in Figure 3; page 18, lines 9-20; 118 in Figure 1; page 8, lines 13-14], and storing the converted files in the displayable format in a third server unit [208 in Figures 2-3; page 13, lines 9-11].

85. A computer system for analyzing data produced for legal purposes, the computer system comprising:

at least one recursive engine [312-316 in Figure 3; page 16, line 20 to page 18, line 3] receiving, from an information system [130 in Figure 1; page 11, lines 15-16] that is external to the computer system for analyzing data produced for legal purposes, a plurality of electronic files [310 in Figure 3; page 16, lines 6-19] that are subject to a legal proceeding [page 7, lines 18-19], the electronic files produced by and belonging to at least one party involved in the legal proceeding [page 11, lines 16-17] and stored in a storage medium [132 in Figure 1; page 11, lines 17-19], said received plurality of electronic files having electronic characteristics that include metadata [page 19, lines 6-10], and said at least one recursive engine extracting the plurality of electronic files from a plurality of paths of a directory structure in the storage medium [page 16, line 20 to page 18, line 3];

a conversion engine converting the recursively extracted electronic files to a searchable text format [134, 336, and 340 in Figure 3; page 20, lines 1-5; page 15, line 25 to page 16, line 4], and obtaining metadata associated with the received electronic files [318, 322, 332 in Figure 3; page 19, lines 6-10];

a first server unit coupled to the conversion engine storing the converted electronic files in the searchable text format [202 in Figures 2-3; page 13, lines 3-5 and lines 11-15];

a second server unit coupled to the conversion engine storing the obtained metadata associated with the received electronic files [204 in Figures 2-3; page 19, lines 8-10]; and

another engine [122 in Figures 1-2; page 12, lines 12-18] in communication with the first and second server units receiving a request for electronic files having a specified metadata characteristic and processing the stored metadata to determine a set of electronic files having the specified metadata characteristic [page 14, lines 9-21; page 28, lines 7-20; 416 in Figure 4; 512 in Figure 6].

37 CFR 41.37(c)(1)(v) requires that "For each independent claim involved in the appeal and for each dependent claim argued separately under the provisions of paragraph (c)(1)(vii) of this section, every means plus function and step plus function as permitted by 35 U.S.C. 112, sixth paragraph, must be identified and the structure, material, or acts described in the specification as corresponding to each claimed function must be set forth with reference to the specification by page and line number, and to the drawing, if any, by reference characters."

Applicants have filed an Amendment concurrent herewith to cancel the means-plus-function claims 81-84.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Whether claims 75-78 are unpatentable under 35 U.S.C. § 101 as being directed towards non-statutory subject matter.

Whether claims 51-53, 55-78, 80, and 85-97 are indefinite under 35 U.S.C. § 112, second paragraph.

Whether claims 51-53, 55-78, 80, and 85-97 are unpatentable under 35 U.S.C. § 103(a) over Johnson (U.S. Patent No. 5,813,009) in view of O'Shea (an article entitled "European Law Databases: an Experiment in Retrieval").

VII. ARGUMENT

A. Claims 75-78 are patentable under 35 U.S.C. § 101 as being directed towards statutory subject matter

The Office Action of July 24, 2008 rejected claims 75-78 under 35 U.S.C. § 101 as allegedly being directed towards non-statutory subject matter. This non-statutory subject matter rejection is not correct.

Independent claim 75 is directed to an article of manufacture, which is statutory subject matter *per se*. Specifically, claim 75 recites "a computer-readable medium having instructions stored thereon that are executable by a processor." Page 10, lines 8-10 of the present application gives examples of a computer-readable medium as including random access memory (RAM), compact disks (CDs), digital video disks (DVDs), magnetic tape, floppy disks, microcode and other mass storage units, all of which are clearly tangible, non-transitory articles of manufacture.

Page 3 of the Office Action of July 24, 2008 correctly notes that the present application states on page 10, lines 13-14 that the computer-readable medium (of the results storage unit 124) may be "a separate component in the network 110." However, pages 3-4 of the Office Action of July 24, 2008 then incorrectly concludes that "since the separate component in the network may be software servers which broadcasting [sic] signals or carrier waves, because a carrier wave or data signal fails to fall into any one of the process, machine, manufacture, or composition of mater [sic] categories of invention under 35 U.S.C. 101, hence, it renders the claim as non-statutory *In Re Nuitjen*."

Importantly, the claims at issue in *In Re Nuitjen* were directed to the resulting encoded signals themselves (*i.e.*, "A *signal* with embedded supplemental data"). *In re Petrus A.C.M. Nuijten*, 500 F.3d 1346, *, 2007 U.S. App. LEXIS 22426, **; 84 U.S. P.Q.2d (BNA) 1495). In rejecting the claims directed to a signal *per se*, the Court noted that "[t]he claims whose

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disallowance Nuijten appeals are not traditional step-by-step process claims, nor are they directed to any apparatus for generating, receiving, processing or storing the signals" and further noted that "such claims have been allowed." *Id.* As recognized in the Office Action of July 24, 2008, the separate component may be a software based server, but such must be stored on the computer-readable medium and execute on a machine, and hence constitutes statutory subject matter. This is true whether without regard to the format of any signals that may be produced by the server. It is further important to note that none of claims 75-78 recite signals *per se*.

It is further noted herein that in the recent case of *In re Bilski*, No. 2007-1130 (Fed. Cir. 2008), the Federal Circuit "reaffirm[ed] that the <u>machine-or-transformation test</u>, properly applied, is the governing test for determining patent eligibility of a process under § 101." *Id.* at page 15 (emphasis ours). The Federal Circuit stated that "Thus, the proper inquiry under § 101 is ... whether the claim meets the machine-or-transformation test. As a result, even a claim that recites 'physical steps' but neither recites a particular machine or apparatus, nor transforms any article into a different state or thing, is not drawn to patent-eligible subject matter. Conversely, a claim that purportedly lacks any 'physical steps' but is still tied to a machine or achieves an eligible transformation passes muster under § 101." *Id.* at 23.

Claims 75-78 pass the machine-or-transformation test affirmed by the Federal Circuit. For example, claim 75 recites throughout a "computer-readable medium," a "computer processor," a "computer system," a "first server unit" that stores content, a "second server unit" that stores metadata, a "display screen," and a "third server unit" that stores converted files in the displayable format. These recited elements tie claim 75 (and its dependent claims) to a machine(s), thereby satisfying the "machine test" affirmed by *In re Bilski*.

As another example, claim 75 recites "converting ... content of the recursively extracted electronic files to provide a searchable text format" and "converting ... the recursively extracted electronic files to a format displayable on a display screen." These "converting" recitations involve a transformation of the extracted electronic files "into a different state or thing," thereby satisfying the "transformation test" affirmed by *In re Bilski*.

In view of the above arguments, claims 75-78 meet statutory subject matter requirements, and the rejections under 35 U.S.C. § 101 should be withdrawn.

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B. Claims 51-53, 55-78, 80, and 85-97 are definite under 35 U.S.C. § 112, second paragraph

The Office Action of July 24, 2008 rejected claims 51-53, 55-78, 80, and 85-97 under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite. In particular, the Examiner alleged the following with regards to the terms "electronic characteristics that include metadata" recited in the claims:

"these claims recite subject matters 'electronic characteristics that include metadata' which lack of explicit definition in the instant specification, because merely disclosed the claimed subject matters by examples does not defined the metes and bounds of the claimed subject matters structure, as such, it renders the claims as indefinite."

The Examiner's allegations that claims 51-53, 55-78, 80, and 85-97 are indefinite are traversed herein. It is argued herewith that a person skilled in the art having the benefit of the present application would indeed understand the meaning of "metadata" and/or "electronic characteristics that include metadata" as recited in the claims.

Pages 19-20 (section III.A.) of the amendment of October 31, 2007 provided the following explanation, which is reproduced in substance below, as to why such terms are definite:

"For example, page 4, lines 9-10 of the present application describes metadata for email messages as 'date/time stamps, author identification, attachment data, tracking IDs, headers.' As another example, page 16, lines 4-5 of the present application describe the metadata as including 'threading information, attachments, properties, directory structures.' Further, page 19, lines 6-7 of the present application describe metadata as including 'conversational thread information, properties, and other electronic characteristics of the files' ... In view of this description of metadata, it is therefore respectfully submitted that the metadata recited in claim 60 is definite.

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As further support for the position that the metadata recited in claim 60 would be understandable to a person skilled in the art having the benefit of the applicants' disclosure and who would be interpreting the scope of claim 60, the following is an example definition of metadata (meta-data or meta data) found in the Free Online Dictionary of Computing (at http://foldoc.org/?meta-data). This online definition is consistent with the description and examples of metadata provided in the present application and as understood by a person skilled in the art:

'Data about data. In data processing, meta-data is definitional data that provides information about or documentation of other data managed within an application or environment. For example, meta-data would document data about data elements or attributes, (name, size, data type, etc) and data about records or data structures (length, fields, columns, etc) and data about data (where it is located, how it is associated, ownership, etc.). Meta-data may include descriptive information about the context, quality and condition, or characteristics of the data."

Furthermore, it is noted herein that MPEP § 2173.02 provides the following guidelines when determining the definiteness of a claim (emphasis ours):

"The essential inquiry pertaining to this requirement is whether the claims set out and circumscribe a particular subject matter with a reasonable degree of clarity and particularity. Definiteness of claim language must be analyzed, not in a vacuum, but in light of:

(A) The content of the particular application <u>disclosure</u>;

- (B) The teachings of the prior art; and
- (C) The claim <u>interpretation</u> that would be given by one possessing the <u>ordinary level of skill</u> in the pertinent art at the time the invention was made.

. . .

[A] claim term that is <u>not</u> used or <u>defined</u> in the specification is <u>not</u> indefinite if the meaning of the claim term is discernible. *Bancorp*Services, L.L.C. v. Hartford Life Ins. Co., 359 F.3d 1367, 1372, 69

USPQ2d 1996, 1999-2000 (Fed. Cir. 2004) (holding that the disputed claim term 'surrender value protected investment credits' which was not defined or used in the specification was discernible and hence not indefinite because 'the components of the term have well recognized meanings, which allow the reader to infer the meaning of the entire phrase with reasonable confidence')."

The Examiner has alleged that the terms "electronic characteristics that include metadata" recited in the claims "lack explicit definition" in the specification. From the above-quoted passages of the MPEP, even assuming *arguendo* and *hypothetically* that the Examiner is correct in that these claim terms are not explicitly defined in the specification, it is nevertheless clear that the meaning of the claim term(s) would be "discernable." For instance and as previously demonstrated above from the cited passage of the amendment of October 31, 2007, the term "metadata" is well-known in the art, and so thereby has a "well recognized meaning[], which allow the reader to infer the meaning of the entire phrase with reasonable confidence."

Furthermore, the above-quoted passages of the MPEP require definiteness to be analyzed based on the content of the disclosure, the teachings of the prior art, and the interpretation that would be given by a person of ordinary skill in the art. It is abundantly clear therefore that by giving explicit examples of metadata (with such examples themselves arguably providing a degree of definition of "metadata") in the specification of the present application, considered in combination with the teachings of the prior art as to what constitutes "metadata" and the interpretation of "metadata" that would be given by a person skilled in the art (*see, e.g.*,

the citations previously provided above from the amendment of October 31, 2007), the terms "electronic characteristics that include metadata" are definite.

Still further, it is noted herein that the description of "metadata" in the specification of the present application is consistent with (rather than being inconsistent with) the understanding of the person skilled in the art, as evident from the above-quoted excerpts from the amendment of October 31, 2007. MPEP § 2173.03 explains that a claim is *indefinite* if there are inconsistencies between the claim, specification, and prior art teachings:

"Although the terms of a claim may appear to be definite, inconsistency with the specification disclosure or prior art teachings may make an otherwise definite claim take on an unreasonable degree of uncertainty. *In re Cohn*, 438 F.2d 989, 169 USPQ 95 (CCPA 1971); *In re Hammack*, 427 F.2d 1378, 166 USPQ 204 (CCPA 1970). In *Cohn*, the claim was directed to a process of treating a surface with a corroding solution until the metallic appearance is supplanted by an 'opaque' appearance. Noting that no claim may be read apart from and independent of the supporting disclosure on which it is based, the court found that the description, definitions and examples set forth in the specification relating to the appearance of the surface after treatment were inherently inconsistent and rendered the claim indefinite."

In the present situation, there are <u>no inconsistencies</u> between the claims, specification, and prior art teachings. As such, the present claims are definite.

In view of the above arguments, the rejection of claims 51-53, 55-78, 80, and 85-97 under 35 U.S.C. § 112, second paragraph, should be withdrawn.

C. Nonobviousness under Section 103 over Johnson in view of O'Shea

Consistent with a long line of judicial holdings, MPEP § 2143.03 states that "All words in a claim must be considered in judging the patentability of that claim against the prior art. *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970)." In order to find *prima*

facie obviousness when combining references, MPEP § 2143(A)(1) states the following (emphasis ours): "Office personnel must articulate the following: (1) a finding that the prior art included each element claimed, although not necessarily in a single prior art reference, with the only difference between the claimed invention and the prior art being the lack of actual combination of the elements in a single prior art reference." MPEP § 706.02(j) further states (emphasis ours): "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references. Ex parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985)."

The rejections of claims 51-53, 55-78, and 80-97 set forth in the Office Action of July 24, 2008 under 35 U.S.C. § 103(a) on the basis of Johnson and O'Shea do not meet these requirements for a rejection based on obviousness, since these references do not teach or suggest all of the claim limitations.

1. Independent claim 60 is nonobvious over Johnson in view of

Independent claim 60 recites, inter alia, the following limitations (emphasis ours):

"receiving, from an information system that is external..., a plurality of electronic files that are stored in a data structure arranged according to a directory structure...;

storing the metadata in a second server unit, said storing including storing information of said directory structure of the received data structure so as to maintain said directory structure."

None of the cited references (whether singly or in combination) discloses, teaches, or suggests maintaining the directory structure of a data structure in which a plurality of received electronic files are stored. The Examiner has alleged in page 6 of the Office Action of July 24,

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O'Shea

2008 that the above limitations are met by Johnson, with the Examiner relying on the following citations to Johnson for the rejection:

> "[e.g., col. 4, lines 45-49, the use of a Re-indexing function that is coupled to the audit log metadata, Fig. 5] ... [e.g., Fig. 4 and associated texts, the Scan and Index section at col. 28, lines 49 col. 29, lines 47]."

The Examiner's assertions above that Johnson meets the limitations of claim 60 are traversed herein. None of the above citations to Johnson teach "storing information of said directory structure of the received data structure so as to maintain said directory structure."

In particular with respect to column 4, lines 45-49 cited by the Examiner, Johnson teaches the following (emphasis ours):

> "These and other objects are achieved with the present invention. In one aspect, the invention is embodied in a computer based records management system and method according to the present invention. The computer based records management system according to the present invention comprises input devices for receiving record data units that may or may not be retained in the system and storing the record data units for possible retention. These record units may comprise scanned documents including or excluding marginalia, old microfilm records, information containing audio and video media, various computer generated media such as floppy discs, hard drive stored data and the like or practically any and all media and data forms that may come to mind that a user may wish to store."

As evident from the above-quoted passage of Johnson, he teaches that his invention provides input devices for receiving "record data units" and for "storing" the record data units. While Johnson does teach "storing" the record data units, this passage is completely silent with regards storing in a manner that maintains the directory structure of the received record

data units, or more particularly "storing information of said directory structure of the received data structure so as to maintain said directory structure" as recited in claim 1.

Indeed and contrary to the recitations of claim 1, Johnson teaches that he does not maintain the original directory structure of his received record units. In particular, Johnson teaches the following in his column 9, lines 5-13; column 14, lines 23-26; and the text corresponding to Figure 8 on column 26, lines 11-31 (emphasis ours):

> "Referring again to FIG. 1, record data units which enter the system from external sources 1 or internal sources 2 are either captured directly by the system or may be received by the system after first being created and organized by an individual or automated process. In those instances, such records may then be organized by those processes into the logical file formats in which they will ultimately be archived and retrieved. (A preferred record filing structure is shown in FIG. 8 and described below.) ...

> The act of certification moves the sub-document within the system from the temporary network storage location to a permanent filing location (cabinet), which may reside on disk or on permanent or erasable optical media...

> FIG. 8 represents a sample filing structure which may be used for filing, storage and retrieval of paper-based (scanned images) documents or electronic documents (e.g., spreadsheets, word processing files, etc.) which are generally handled for filing and retrieval in the same manner as paper-based files are handled.

> The elements of this structure include a cabinet 42, which represents a physical storage location; a case type 43, which represents a type of file, such as a claim or a contract; cases 44, which represent specific instances of the case type, such as specific claims or contract files; folders 45, which represent logical filing units within the cases; documents 46, which represent individual documents (or groups of records) stored

within the folders; and <u>sub-documents</u> 47, a further definition and breakdown of information stored within documents. The last unit of case-based files is the <u>page</u> 48, which represents a specific scanned image or electronic record. <u>This unit has been defined, for example, as a record data unit</u>. The sample file structure mimics a paper file stored within a separate folder."

From the above-quoted passages of Johnson, it is abundantly clear that after he receives his electronic documents (records) from the external sources 1, Johnson performs a process in which "such records may then be organized by those processes into the logical file formats in which they will ultimately be archived and retrieved." That is, Johnson organizes/re-organizes the records into "logical file formats", thereby changing the original arrangement in which the records were received. Further by performing the "certification" process as explained above, Johnson "moves" sub-documents into "cabinets." This movement/relocation of the sub-document, away from its original location in the parent directory, also means that Johnson is again changing the original arrangement in which the Still further, by arranging the records in the manner sub-document/record was received. described with respect to Figure 8, in which Johnson's invention arranges the records according to "case type," "specific instances of case types," "logical filing units," "documents," and "sub-documents" files/folders Johnson has inherently/explicitly not preserved the directory structure in which the electronic files were received in. His arrangement of files/folders in Figure 8 is a new logical arrangement (i.e., an arrangement that Johnson refers to as a "logical file format") that does not represent the original directory structure of the records, since the records have been processed/filtered by Johnson from various external sources in order to be logically arranged in the individual folders/files as defined in his Figure 8.

On page 6 of the Office Action of July 24, 2008 and as mentioned above, the Examiner further relies on Figure 3, the "re-indexing" function in Figure 5, and the "scan and index" section in column 28, line 49 to column 29, line 47 of Johnson. These teachings of Johnson also do not meet the limitations that require the directory structure of the received electronic files to be maintained.

First, with respect to Figure 3, an "archive catalog" is depicted, with which the other components of the system/method of Figure 3 communicate. As previously explained above, Johnson's archiving technique does not maintain the original directory structure, since he reorganizes his records into "logical file formats" for archiving in the manner shown in Figure 8.

Second, with respect to the "re-indexing" function of Figure 5, Johnson explicitly shows a "modify" function before (upstream of) the "re-indexing" function. By performing this modify function, Johnson inherently/explicitly does not maintain the original directory structure of the received electronic files.

Third, with respect to the "scan and index" section of Johnson, his column 28, lines 61-65 specifically teach the following (emphasis ours) therein:

"For case files to be stored within the system, the user may attach appropriate index information (search criteria) to imaged cases and subdocuments, organize documents for formal filing and retrieval and save the images to a temporary network storage device."

As evident from the above-quoted passage of Johnson, he is completely silent as to maintaining the directory structure of the received electronic files. He instead teaches that the user may attach "index information" and "organize documents for formal filing." Attaching index information suggests that the original directory structure is being changed, rather than maintained, since new index information is being added. Further and as previously explained extensively above, Johnson's organization of the documents into his "logical file formats" that creates files for "case type," "specific instances of case types," "logical filing units," "documents," and "sub-documents" operates to alter or destroy any original directory structure of the received electronic files.

In view of the above arguments, Johnson does not meet the requirements of claim 60 that pertain to "maintain the directory structure" of the data structure in which the received electronic files are stored in. O'Shea does not cure these deficiencies of Johnson. O'Shea merely teaches a databasing technique/system, and is silent as to any intake/receiving of electronic files

stored in a data structure arranged according to a directory structure and storing directory structure information so as to maintain that directory structure.

Accordingly, claim 60 is nonobvious over Johnson and O'Shea.

Claim 60 contains other limitations that are nonobvious over the cited references. For example, claim 60 further recites, *inter alia*, the following limitations:

"recursively extracting the plurality of electronic files from a plurality of paths of said directory structure of the data structure that is received from the external information system."

The Examiner admitted on page 7 of the Office Action of July 24, 2008 that Johnson does not disclose these teachings. To supply the missing teachings of Johnson, the Examiner relies upon O'Shea. However, O'Shea does not cure the deficiencies of Johnson.

In particular, Section 4.6 of O'Shea describes a process in a database to increase the computational efficiency of document searching, by listing relevant documents together in a "cluster." To build clusters, O'Shea first performs a "precompute a clustering of the documents in the database, so that a set of documents similar to an initial document can be found simply by listing the members of the relevant document cluster." O'Shea then adds each document in turn to a nearest existing cluster, or uses a document to create a new cluster if that document's distance from all clusters exceeds a certain threshold. He applies his cluster-building algorithm a number of times, first to divide the data into large clusters and then "recursively to break down these clusters into smaller clusters."

Thus from the above-described teachings of O'Shea, his recursion is used to "break down" large clusters into smaller clusters. This is the extent of any "recursively" performed operation disclosed in O'Shea.

The recursive process described in O'Shea is different from the recursive extraction of claim 60. In O'Shea, recursion is used to break down a large cluster of documents, into smaller clusters of documents. Stated in another way, O'Shea uses recursion to change (make smaller) the size of the large cluster of documents, such that the resulting smaller cluster of

documents provides a more relevant set of search results for the user's query. In claim 60, the recursion is performed to extract electronic files from a plurality of paths of a directory structure.

Hence, since both Johnson and O'Shea fail to meet the further limitations of claim 60 that require "recursively extracting the plurality of electronic files from a plurality of paths of said directory structure of the data structure that is received from the external information system," claim 60 is further nonobvious.

2. Dependent claims 51-53, 55-59, and 61-68 are nonobvious over Johnson in view of O'Shea

Dependent claim 51-53, 55-59, and 61-68 depend on claim 60, and by virtue of this dependency, are patentable for the reasons set forth above with respect to claim 60.

3. Independent claim 69 is nonobvious over Johnson in view of O'Shea

Independent claim 69 recites, inter alia, the following limitations (emphasis ours):

"recursively extracting from a plurality of paths of a directory structure of the data structure the plurality of electronic files received from the external information system."

The Examiner admitted on page 7 of the Office Action of July 24, 2008 that Johnson does not disclose these teachings. To supply the missing teachings of Johnson, the Examiner relies upon O'Shea. However, O'Shea does not cure the deficiencies of Johnson.

In particular, Section 4.6 of O'Shea describes a process in a database to increase the computational efficiency of document searching, by listing relevant documents together in a "cluster." To build clusters, O'Shea first performs a "precompute a clustering of the documents in the database, so that a set of documents similar to an initial document can be found simply by listing the members of the relevant document cluster." O'Shea then adds each document in turn to a nearest existing cluster, or uses a document to create a new cluster if that document's distance from all clusters exceeds a certain threshold. He applies his cluster-building algorithm a number

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of times, first to divide the data into large clusters and then "recursively to break down these clusters into smaller clusters."

Thus from the above-described teachings of O'Shea, his recursion is used to "break down" large clusters into smaller clusters. This is the extent of any "recursively" performed operation disclosed in O'Shea.

The recursive process described in O'Shea is different from the recursive extraction of claim 69. In O'Shea, recursion is used to break down a large cluster of documents, into smaller clusters of documents. Stated in another way, O'Shea uses recursion to change (make smaller) the size of the large cluster of documents, such that the resulting smaller cluster of documents provides a more relevant set of search results for the user's query. In claim 69, the recursion is performed to extract electronic files from a plurality of paths of a directory structure.

Hence, since both Johnson and O'Shea fail to meet the further limitations of claim 69 that require "recursively extracting from a plurality of paths of a directory structure of the data structure the plurality of electronic files received from the external information system," claim 69 is nonobvious.

4. Dependent claim 96 is nonobvious over Johnson in view of

O'Shea

Dependent claim 96 depends on claim 69, and by virtue of this dependency, is patentable for the reasons set forth above with respect to claim 69. Dependent claim 96 is also nonobvious due to the limitations recited therein. In particular, claim 69 recites, *inter alia*, the following limitations (emphasis ours):

"obtaining and storing ... metadata that <u>preserves information regarding</u> the directory structure in which the files are stored."

As previously alluded to above with respect to claim 60, Johnson does not preserve information regarding the original directory structure in which the files are stored. That is, since Johnson reorganizes his record units into "logical file formats" for storing in his archival system of Figure 8 (which organizes the records into various user-defined folders, sub-folders, logical file

units, etc.), Johnson necessarily changes or removes (rather than preserves) the directory structure information of the original data structure of the received electronic files.

Accordingly, since the cited references do not meet the limitations of claim 96, claim 96 is nonobvious.

5. Dependent claims 70-74 and 97 are nonobvious over Johnson in

view of O'Shea

Dependent claims 70-74 and 97 depend on claim 69, and by virtue of this dependency, are patentable for the reasons set forth above with respect to claim 69.

6. Independent claim 75 is nonobvious over Johnson in view of

O'Shea

Independent claim 75 recites, inter alia, the following limitations (emphasis ours):

"recursively extracting the plurality of electronic files from a plurality of paths of a directory structure of the loaded data structure."

The Examiner admitted on page 7 of the Office Action of July 24, 2008 that Johnson does not disclose these teachings. To supply the missing teachings of Johnson, the Examiner relies upon O'Shea. However, O'Shea does not cure the deficiencies of Johnson.

In particular, Section 4.6 of O'Shea describes a process in a database to increase the computational efficiency of document searching, by listing relevant documents together in a "cluster." To build clusters, O'Shea first performs a "precompute a clustering of the documents in the database, so that a set of documents similar to an initial document can be found simply by listing the members of the relevant document cluster." O'Shea then adds each document in turn to a nearest existing cluster, or uses a document to create a new cluster if that document's distance from all clusters exceeds a certain threshold. He applies his cluster-building algorithm a number of times, first to divide the data into large clusters and then "recursively to break down these clusters into smaller clusters."

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Thus from the above-described teachings of O'Shea, his recursion is used to "break down" large clusters into smaller clusters. This is the extent of any "recursively" performed operation disclosed in O'Shea.

The recursive process described in O'Shea is different from the recursive extraction of claim 75. In O'Shea, recursion is used to break down a large cluster of documents, into smaller clusters of documents. Stated in another way, O'Shea uses recursion to change (make smaller) the size of the large cluster of documents, such that the resulting smaller cluster of documents provides a more relevant set of search results for the user's query. In claim 75, the recursion is performed to extract electronic files from a plurality of paths of a directory structure.

Hence, since both Johnson and O'Shea fail to meet the further limitations of claim 75 that require "recursively extracting the plurality of electronic files from a plurality of paths of a directory structure of the loaded data structure," claim 75 is nonobvious.

7. Dependent claims 76-78 are nonobvious over Johnson in view of

Dependents claim 76-78 depend on claim 75, and by virtue of this dependency, are patentable for the reasons set forth above with respect to claim 75.

8. Independent claim 85 is nonobvious over Johnson in view of O'Shea

Independent claim 85 recites, inter alia, the following limitations (emphasis ours):

"at least one <u>recursive engine extracting</u> the plurality of electronic files from a plurality of paths of a directory structure in the storage medium."

The Examiner admitted on page 7 of the Office Action of July 24, 2008 that Johnson does not disclose these teachings. To supply the missing teachings of Johnson, the Examiner relies upon O'Shea. However, O'Shea does not cure the deficiencies of Johnson.

In particular, Section 4.6 of O'Shea describes a process in a database to increase the computational efficiency of document searching, by listing relevant documents together in a

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O'Shea

"cluster." To build clusters, O'Shea first performs a "precompute a clustering of the documents in the database, so that a set of documents similar to an initial document can be found simply by listing the members of the relevant document cluster." O'Shea then adds each document in turn to a nearest existing cluster, or uses a document to create a new cluster if that document's distance from all clusters exceeds a certain threshold. He applies his cluster-building algorithm a number of times, first to divide the data into large clusters and then "recursively to break down these clusters into smaller clusters."

Thus from the above-described teachings of O'Shea, his recursion is used to "break down" large clusters into smaller clusters. This is the extent of any "recursive" operation disclosed in O'Shea.

The recursive process described in O'Shea is different from the recursive engine of claim 85. In O'Shea, recursion is used to break down a large cluster of documents, into smaller clusters of documents. Stated in another way, O'Shea uses recursion to change (make smaller) the size of the large cluster of documents, such that the resulting smaller cluster of documents provides a more relevant set of search results for the user's query. In claim 85, the recursive engine extracts electronic files from a plurality of paths of a directory structure.

Hence, since both Johnson and O'Shea fail to meet the further limitations of claim 85 that require "at least one recursive engine extracting the plurality of electronic files from a plurality of paths of a directory structure in the storage medium," claim 85 is nonobvious.

9. Dependent claims 86-95 are nonobvious over Johnson in view of O'Shea

Dependent claims 86-95 depend on claim 85, and by virtue of this dependency, are patentable for the reasons set forth above with respect to claim 85.

In view of the arguments as set forth above, the Examiner's rejections of the claims should be withdrawn.

Respectfully submitted, Black Lowe & Graham PLLC

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VIII. CLAIMS APPENDIX

The method of claim 60, further comprising returning an indication of the 51. determined set of electronic files.

The method of claim 51 wherein returning the indication of the set of 52. electronic files includes returning a list of electronic files that contain content that matches the

specified text or metadata characteristic.

53. The method of claim 60 wherein storing the metadata in the second server

unit includes storing the metadata in a database.

The method of claim 60 wherein the legal proceeding is a discovery 55.

proceeding that is part of a lawsuit, a mergers and acquisitions proceeding, or a due diligence

effort.

The method of claim 60 wherein receiving the plurality of electronic files 56.

that are subject to the legal proceeding, the electronic files produced by at least one party involved

in the legal proceeding, comprises:

receiving, from the information system that is external to the computer system for

analyzing data for legal purposes, at least some electronic files that have been previously

exchanged between the at least one party and another party prior to the legal proceeding, the

external information system belonging to the at least one party of the legal proceeding and having

stored therein these electronic files, wherein the plurality of electronic files are received at the

computer system during the legal proceeding, the computer system not belonging to any party of

the legal proceeding.

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- 57. The method of claim 60 wherein the received electronic files include stored emails, and wherein storing the metadata in the second server unit includes storing threading information associated with the emails.
- 58. The method of claim 60 wherein receiving the plurality of electronic files that are subject to the legal proceeding from the external information system includes receiving an electronic calendar, electronic schedule, spreadsheet, word-processing file, electronic files arranged in the directory structure, or graphical data.
- 59. The method of claim 60 wherein storing the metadata in the second server unit includes storing metadata associated with a native format of each of the received electronic files.
- 60. A method in a computer system for analyzing data produced for legal purposes, the method comprising:

receiving, from an information system that is external to the computer system for analyzing data produced for legal purposes, a plurality of electronic files that are stored in a data structure arranged according to a directory structure, that are subject to a legal proceeding, and that are produced by at least one party involved in the legal proceeding, said received plurality of electronic files having electronic characteristics that include metadata;

recursively extracting the plurality of electronic files from a plurality of paths of said directory structure of the data structure that is received from the external information system;

storing the recursively extracted electronic files in a searchable text format in a first server unit, including storing textual content of the recursively extracted electronic files in the searchable text format in the first server unit;

obtaining the metadata from each of the recursively extracted electronic files, and storing the metadata in a second server unit, said storing including storing information of said directory structure of the received data structure so as to maintain said directory structure;

converting the recursively extracted electronic files to a read-only format, and storing the electronic files in the read-only format in a third server unit;

receiving a request for electronic files having a specified text or metadata characteristic; and

processing the stored metadata to determine a set of electronic files having the specified text or metadata characteristic, thereby facilitating processing of the determined set of electronic files for legal purposes.

61. The method of claim 60 wherein at least some of the recursively extracted electronic files include emails having attachments, the method further comprising:

storing the emails in a read-only format in the third server unit and in the searchable format in the first server unit;

separately storing the attachments in a read-only format in the third server unit and in a searchable format in the first server unit; and

storing metadata associated with the attachments in the second server unit.

- 62. The method of claim 60 wherein recursively extracting the plurality of electronic files from the plurality of paths of the data structure received from the external information system includes recursively extracting the plurality of electronic files from a storage medium delivered from the external information system in response to a production request issued during the legal proceeding.
- 63. The method of claim 60 wherein recursively extracting the plurality of electronic files includes recursively extracting the plurality of electronic files using application programs that can read and translate the electronic files.
- 64. The method of claim 60, further comprising providing a user interface to display an electronic file having the specified text or metadata characteristic and that is responsive to the request, and wherein the user interface is usable to apply legal annotations to the electronic files having the specified text or metadata characteristic and that are responsive to the request.

The method of claim 64 wherein the legal annotations include at least one 65. of reviewed, privileged, hot, responsive, or witness preparation annotations.

The method of claim 60, further comprising providing summary 66.

information indicative of electronic files that are available to be processed to determine the set of

electronic files having the specified text or metadata characteristic.

The method of claim 60, further comprising processing the electronic files 67.

in the searchable text format to determine the set of electronic files having the specified text

characteristic.

The method of claim 60 wherein receiving the request for electronic files 68.

having a specified text or metadata characteristic includes receiving a request that specifies at

least one of the following: a word in an electronic file, a sender of an email, a recipient of an

email, a subject of an email, a date associated with an electronic file, properties information

associated with the electronic file, an annotation to an electronic file, attachment information, a

case identifier, or a collection name.

A method in a computer system for facilitating the analysis of data 69.

produced for legal purposes, the method comprising:

receiving, from an information system that is external to the computer system for

analyzing data produced for legal purposes, a plurality of electronic files that are subject to a legal

proceeding, that are produced for purposes of the legal proceeding by at least one party involved

in the legal proceeding, and that are stored prior to being received by the computer system in a

data structure associated with the external information system, said received plurality of

electronic files having electronic characteristics that include metadata;

recursively extracting from a plurality of paths of a directory structure of the data

structure the plurality of electronic files received from the external information system;

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converting each of the recursively extracted electronic files to a searchable text format, and storing in a first server unit content of the converted files in the searchable text format;

obtaining and storing in a second server unit said metadata from each of the recursively extracted electronic files;

converting each of the recursively extracted electronic files to a format displayable on a display screen, and storing the converted files in the displayable format in a third server unit; and

responding to a request for at least one file having specified metadata or text characteristics using respectively at least one of the stored metadata or the stored content.

70. The method of claim 69 wherein receiving the plurality of electronic files that are subject to the legal proceeding further comprises:

receiving, from the external information system, at least some electronic files that have been previously exchanged between the at least one party and another party prior to the legal proceeding and stored in the data structure, the external information system and the data structure belonging to the at least one party of the legal proceeding, and

the computer system not belonging to the at least one party.

71. The method of claim 69 wherein the received electronic files include emails, at least some of which have attachments, the method further comprising:

storing the emails in the displayable format in the third server unit and in the searchable format in the first server unit;

separately storing the attachments in said displayable format in the third server unit and in said searchable text format in the first server unit; and

storing metadata associated with the attachments in the second server unit.

72. The method of claim 71 wherein obtaining and storing metadata from each of the recursively extracted electronic files includes obtaining and storing in the second server unit threading information associated with the emails.

73. The method of claim 69 wherein recursively extracting the electronic files from the data structure comprises:

determining which versions of applications can respectively read each of the electronic files in the data structure; and

using the determined versions of the applications to read their respective electronic files.

74. The method of claim 69, further comprising:

receiving a query for electronic files having a specified metadata or text characteristic;

returning a response to the query, the response being indicative of electronic files that have the specified metadata or text characteristic; and

presenting a copy of at least one of these electronic files in a user interface along with legal annotation selections to apply to the copy of the electronic file.

75. An article of manufacture for a computer system, the article of manufacture comprising:

a computer-readable medium having instructions stored thereon that are executable by a computer processor to analyze data produced for legal purposes, by:

loading, from an information system external to the computer system having the machine-readable medium, a plurality of electronic files that are subject to a legal proceeding, that are produced by at least one party involved in the legal proceeding, and that are stored in a data structure associated with the external information system prior to being loaded at the computer system, said loaded plurality of electronic files having electronic characteristics that include metadata;

recursively extracting the plurality of electronic files from a plurality of paths of a directory structure of the loaded data structure;

converting and storing in a first server unit content of the recursively extracted electronic files to provide a searchable text format;

obtaining and storing in a second server unit said metadata from each of the recursively extracted electronic files;

converting the recursively extracted electronic files to a format displayable on a display screen, and storing the converted files in the displayable format in a third server unit.

76. The article of manufacture of claim 75 wherein the instructions to load the electronic files include instructions to:

load, from the external information system, at least some electronic files that have been exchanged between the at least one party and another party prior to the legal proceeding and stored in the data structure, the external information system and the data structure belonging to the at least one party of the legal proceeding, and the computer system not belonging to the at least one party of the legal proceeding.

77. The article of manufacture of claim 75 wherein the loaded electronic files include emails, at least some of which have attachments, the computer-readable medium further including instructions stored thereon that are executable by said processor to:

store the emails in a displayable format in the third server unit and in the searchable format in the first server unit;

separately store the attachments in said displayable format in the third server unit and in said searchable text format in the first server unit; and

store metadata associated with the attachments and threading information associated with the emails in the second server unit.

- 78. The article of manufacture of claim 75 wherein the loaded electronic files include an electronic calendar, an electronic schedule, a spreadsheet, a word-processing file, electronic files arranged in the directory structure, or graphical data.
- 80. The computer system of claim 82, further comprising a means for returning an indication of the determined set of electronic files and for presenting summary information.

81. (PENDING CANCELATION) The computer system of claim 82 wherein the means for receiving the plurality of electronic files that are subject to the legal proceeding, the electronic files produced as part of the legal proceeding by at least one party involved in the legal proceeding, comprises:

a means for loading onto the computer system during the legal proceeding, from the external information system, at least some electronic files that have been previously exchanged between the at least one party and another party prior to the legal proceeding and stored on the external information system, wherein the external information system belongs to the at least one party of the legal proceeding, and wherein the computer system does not belong to the at least one party of the legal proceeding.

A computer system for analyzing data 82. (PENDING CANCELATION) produced for legal purposes, the computer system comprising:

a first means for receiving, from an information system that is external to the computer system for analyzing data produced for legal purposes, a plurality of electronic files that are subject to a legal proceeding, the electronic files produced as part of the legal proceeding by at least one party involved in the legal proceeding, said received plurality of electronic files having electronic characteristics that include metadata;

> wherein said first means includes a means for recursively extracting the plurality of electronic files from a plurality of paths of a directory structure of the data structure provided from the external information system;

> wherein said first means for receiving includes a means for converting the extracted electronic files to a searchable text format using a conversion engine and for storing the converted electronic files in the searchable text format in a first server unit, including a means for generating and storing in the first server unit textual content of the recursively extracted electronic files to provide the searchable text format;

> wherein said first means for receiving includes a means for converting, including means for obtaining and storing in a second server unit using the

conversion engine, said metadata from each of the recursively extracted electronic files:

wherein said first means for receiving includes a means for converting the recursively extracted electronic files to a read-only format using the conversion engine, and for storing the converted electronic files in the read-only format in a third server unit;

a second means for receiving a request for electronic files having a specified text or metadata characteristic; and

a third means for applying said request to the stored metadata to determine a set of electronic files having the specified text or metadata characteristic.

83. (PENDING CANCELATION) The computer system of claim 82 wherein at least some of the recursively extracted electronic files include emails having attachments, and wherein said first means for receiving includes:

a first converter means for storing the emails in a read-only format in the third server unit and in the searchable text format in the first server unit;

a second converter means for separately storing the attachments in said read-only format in the third server unit and in said searchable text format first server unit; and

an upload means for storing metadata associated with the attachments in the second server unit.

84. (PENDING CANCELATION) The computer system of claim 82, further comprising a user interface means for generating the request and for presenting an indication of the set of electronic files having the specified characteristic, the user interface means including a means for adding annotations to a copy of an electronic file presented thereon, the annotations indicating information useful for the legal proceeding.

85. A computer system for analyzing data produced for legal purposes, the computer system comprising:

at least one recursive engine receiving, from an information system that is external to the computer system for analyzing data produced for legal purposes, a plurality of electronic files that are subject to a legal proceeding, the electronic files produced by and belonging to at least one party involved in the legal proceeding and stored in a storage medium, said received plurality of electronic files having electronic characteristics that include metadata, and said at least one recursive engine extracting the plurality of electronic files from a plurality of paths of a directory structure in the storage medium;

a conversion engine converting the recursively extracted electronic files to a searchable text format, and obtaining metadata associated with the received electronic files;

a first server unit coupled to the conversion engine storing the converted electronic files in the searchable text format;

a second server unit coupled to the conversion engine storing the obtained metadata associated with the received electronic files; and

another engine in communication with the first and second server units receiving a request for electronic files having a specified metadata characteristic and processing the stored metadata to determine a set of electronic files having the specified metadata characteristic.

- 86. The computer system of claim 85, further comprising at least one application that can read a format of the received electronic files.
- 87. The computer system of claim 85 wherein the received electronic files include emails, at least some of which have attachments, the computer system further including:

at least one controller coupled to the recursive engine determining a server unit to which to send the extracted electronic files; and

a third server unit coupled to the controller storing the emails in a format displayable on a display screen and separately storing the attachments in the displayable format, wherein the first server unit stores the attachments in said searchable text format and wherein the

second server unit stores metadata associated with the attachments and threading information associated with the emails.

The computer system of claim 85, further comprising a first administration 88.

program generating another directory structure in the first server unit that indexes text data stored

therein.

The computer system of claim 88, further comprising a second 89.

administration program generating catalog and directory parameters that reference the directory

structure in the first server unit and the text data stored therein.

The computer system of claim 85, further comprising at least one 90.

administration program generating catalog and database parameters that reference the second

server unit and the metadata stored therein.

The computer system of claim 85, further comprising another server unit, 91.

coupled between a client terminal and the another engine, receiving the request from the client

terminal and passing the request to the another engine to allow the another engine to apply the

specified characteristic in the request to at least one of the first and second server units to the

database, the another engine being configured to return responsive results of the request to

another server unit.

The computer system of claim 91 wherein the another server unit includes 92.

a virtual directory referencing data stored in the first and second server units.

The computer system of claim 85, further comprising: 93.

a server coupled to the another engine and to the first and second server units;

a user authentication unit communicatively coupled to the server controlling access

to the server;

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a user information unit communicatively coupled to the server storing information associated with users authenticated by and provided with access by the user authentication unit; and

an administration unit supporting services between the server and the user authentication and user information units.

- 94. The computer system of claim 93 wherein the server supports legal annotation tools on a user interface that is arranged to present a copy of an electronic file that has the specified characteristic.
- 95. The computer system of claim 85 wherein the first and second server units comprise part of a database system.
- 96. The method of claim 69 wherein the obtaining and storing metadata from each of the recursively extracted electronic files in the second server unit further comprises:

obtaining and storing in the second server unit metadata that preserves information regarding the directory structure in which the files are stored.

97. The method of claim 69 wherein the responding to the request for at least one file having specified metadata or text characteristics using respectively at least one of the metadata or the stored content comprises:

responding to a request for at least one file having metadata characteristics that are based upon an arrangement of the at least one file in the directory structure using the stored metadata.

IX. <u>EVIDENCE APPENDIX</u>

None.

X. RELATED PROCEEDINGS APPENDIX

None.